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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/562,244	12/22/2005	Franz Amtmann	AT03 0034 US1	6063
65913 NXP, B.V. NXP INTELLECTUAL PROPERTY & LICENSING M/S41-SJ 1109 MCKAY DRIVE SAN JOSE, CA 95131	7550 09/25/2009		EXAMINER KHAN, OMER S	
			ART UNIT 2612	PAPER NUMBER
			NOTIFICATION DATE 09/25/2009	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ip.department.us@nxp.com

Office Action Summary

Application No.

10/562,244

Applicant(s)

AMTMANN ET AL.

Examiner

Omer S. Khan

Art Unit

2612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 June 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This communication is in response to amendments filed on 06/04/2009.
2. In the application claims 1-11 remain pending.

Response to Arguments

3. Applicant's argument with respect to the 35 USC 112 (1) rejections is persuasive. Rejection is withdrawn. However, the claims are broad and can be interrupted in view of the specification that distinguishing dataset and identifying dataset are the same.
4. Applicant's argument with respect to the drawing is understood; however, examiner would like the applicant to reconsider amending the drawing, to incorporate the claimed subject matter. Claims 5 and 10 are claiming a random number generator, which generates the hash value, and the independent claims 1 and 6 states, "...generating a hash value in the transponder, the hash value identifying a part of a distinguishing dataset that is stored in of the transponder, ...; using the hash value, accessing the part of the distinguishing dataset; selecting a transmission parameter from a set of transmission parameters by using the accessed part from the distinguishing dataset." These are some key elements of the claims, and therefore the random number generator is the prominent attribute to the invention.
5. Applicant's argument with respect to the 35 USC 102(b) rejection is moot in view of new grounds of rejection.

Drawings

6. New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because Fig 1 does not show a random number generator that are being claimed. Drawing must show every prominent attributes or aspects of the claimed subject matter. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cato in US 5539394, further in view of Pavese US 6549536.

Consider claims 1 and 6, a method of placing a transponder in an inventory in a communication station 21, the method comprising: activating an inventory-making process in the transponder 10 using a process-controlling circuitry 41 configured to

control, an inventory-making process for placing the integrated circuit 10 in an inventory in a communication station 21, See Cato Col. 1 I. 15 -20; generating a hash value in the transponder, i.e. hashed number, the hash value identifying a part of a distinguishing dataset that is stored in of the transponder, See col. 5 I. 50-55, the distinguishing dataset being characteristic for the transponder; using the hash value, accessing the part of the distinguishing dataset; selecting a transmission parameter from a set of transmission parameters, i.e. time slot that will be used by the tag for the reply from a set of many time slots transmitted by the reader, by using the accessed part from the distinguishing dataset; and using the selected transmission parameter, transmitting an identifying dataset for the transponder to the communication station to place the transponder in the inventory in the communication station, the identifying dataset being is characteristic for the transponder and is intended for the placing of the transponder in an inventory,

Cato discusses a RFID reader is communicating wirelessly with the tags by transmitting an interrogation signal, **Col. 5 I. 20-31**, tag is responding back to the interrogation signal after computing its own time slot, **Col. 9 I. 11-21**, tag receives an acknowledging clear response when the tags time slots matches with the reader's time slot, **Col. 9 I. 22-26, 33-37**.

The invention is accomplished by the reader first broadcasting a set of parameters to all the tags in the read volume. The broadcast initiates a series of time slots with which the reader and the tags get synchronized. Each tag uses the broadcast parameters, their unique identity, and some or all the data they contain to calculate a

time slot, i.e. the claimed parameter, in which it will communicate with the reader. The parameters transmitted from the reader to the tags can be, but are not limited to, a hashing base number (which is the same as the number of time slots), a data field selector, a hashing algorithm identifier, and a command. The individual tag's time slot selection calculation is done based on a hashing algorithm, **Col. 3 I. 31-43**. The base number is used as a divisor to calculate the hashed number. The tag's identification serial number is divided by a divisor (the hashing base number) to produce a remainder (the hashed number) which corresponds to the communication time slot in which the tag will transmit, **Col. 5 I. 50-55**.

Cato teaches that the hashed number which is calculated on the transponder used to determine the time slot used as a reply of that particular transponder, col. 5 I. 50 55. Cato does not disclose an inherent step which is looking up that hashed number in a table or database of transponder's memory from a set of time slots the transponder has received, see col. 3 I. 40, which would correspond to the identification of the tag. In an analogous art, Pavesi discloses when a packet is received; an equivalent "hash value" is computed quickly from its incoming identifier, i.e. Cato's incoming parameters. This value points to a hash table (named a "slot") that corresponds to one or more outgoing identifiers, i.e. Cato's tag ID, **See Pavesi, col. 3 I. 41-44**.

It would have been obvious to an ordinary skilled artisan at the time of invention to modify the invention of Cato, and use the computed hash value to look up the tags identification; therefore, each tag replies back in their computed time slot and thus reduce the chance of collision, **See Pavesi, col. 3 I. 41-44**.

Consider claim 2, a method as claimed in claim 1, characterized in that, in the inventory-making process, a time slot is selected from a time-slot sequence by using the accessed part of the distinguishing dataset, and in that, in the inventory-making process, the identifying dataset for the transponder is transmitted from the transponder to the communication station by using the selected time slot, **Col. 5 l. 50-55.**

Consider claims 3, a method as claimed in claim 1, characterized in that the hash value, i.e. the hashed number, is generated by means of a hash-value counting stage provided in the transponder, **Col. 5 l. 50-55.**

Consider claim 8, a circuit as claimed in claim 6, characterized in that the hash-value generating circuit includes a hash-value counting stage, **See Cato, col. 9 l. 17-21 after calculating its time slot the tag will count time slots until its time slot occurs.**

Consider claims 4 and 9, a method as claimed in claim 3, characterized in that the hash-value counting stage is set to a preset starting hash value after a power-on reset in the transponder.

Tags are powered by radiation from the reader or by any other convenient means, i.e. passive tags, and they will receive their hash base value upon interrogation – when the tags are powered by radiation. After calculating its own time slot, the tag will count time slots until its time slot occurs as set forth graphically in the timing chart of FIG. 4. **Col. 2 l. 53-54, col. 9 l. 17-19.**

Consider claims 5 and 10, a method as claimed in claim 1, characterized in that the hash value is generated by means of a random number generator provided in the transponder.

Efficient hashing operation during read cycles requires matching the algorithm to the encoding of information and selecting the proper randomizing divisor for the sample universe, **Col. 4 l. 11-14**. In order to distribute ASCII nonrandom data smoothly, the hashing algorithm must match the nature of the data. Thus the necessity to vary the hashing algorithm used. Cato does not show a random generator; however, if the base hash value can be the proper randomizing divisor then the remainder hashed value will be a random value. Nevertheless, Cato incorporates by reference, U.S. Pat. No. 4,471,345 describes a tag and portal system for monitoring the whereabouts of people wearing the tags. Up to six tags may be simultaneously interrogated as their holders pass through a doorway. The tags respond to interrogation signals generated by the portal and their response occurs after a pseudorandom delay. The tag circuit employs a pseudorandom sequence generator. The pseudorandom delay is used to avoid data collisions by the six responding tags.

Consider claim 7, a circuit as claimed in claim 6, characterized in that the transmission-parameter selecting means includes a time-slot selecting stage that is configured to select a time slot from a time-slot sequence, and the transmission circuitry configured to transmit the identifying dataset during the selected time slot from the integrated circuit to the communication station the for the placing of the integrated circuit

in an inventory, **See Cato, Col. 3 l. 31-43, Col. 5 l. 50-55. See Cato, col. 9 l. 17-21 after calculating its time slot the tag will count time slots until its time slot occurs and sends its data on the corresponding time slot. See Pavesi, col. 3 l. 41-44.**

Consider claim 11, a transponder, characterized in that the transponder (1) is provided with an integrated circuit as claimed in claim 6. **Col. 4 l. 45**, Transponder 10 is integrated into a chip, a transmission coil 47 is connected to the IC, and See Cato Fig 3 shows an antenna coil 47 connected to the identification chip 10, **col. 4 l. 51.**

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Mani, Christophe, US 20040012486 A1, See abstract and ¶ 65, the module TAG3 responds to the command PCALL16 by sending a message R(30) as the part ID2 of its identification number is equal to 0 and corresponds to the first time slot.

Bandy; William R. et al. US 6002344 A, See Abstract, Each tag increments a first tag count in response to the clock signals, and transmits the Tag ID assigned to the tag when the first tag count corresponds to the Tag ID assigned to the tag, permanent identification number assigned to said each tag corresponds to said time slot number.

1. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Omer S. Khan whose telephone number is (571)270-5146. The examiner can normally be reached on M-F 7:30 - 5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian A. Zimmerman can be reached on 571-272-3059. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Omer S Khan/
Examiner, Art Unit 2612

/Brian A Zimmerman/
Supervisory Patent Examiner, Art Unit 2612